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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/020,937	12/19/2001	Dong June Kim	MRE-0047	2861
34610	7590	06/09/2004	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			CHIN, PAUL T	
			ART UNIT	PAPER NUMBER

3652

DATE MAILED: 06/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/020,937

Applicant(s)

KIM, DONG JUNE

Examiner

PAUL T. CHIN

Art Unit

3652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. The appeal brief filed March 8, 2004 and the arguments presented therewith have been carefully considered and they are persuasive. Therefore, the final rejection made has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Asia et al. (6,012,222) and Asai et al. (6,012,222) in view of the Japanese Patent (JP 8-326864) or the Prior art (of Fig. 1), presented by applicant.

#### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1,2,4-9, and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Asai et al. (6,012,222).

Asai et al. (6,012,222) shows a part suction head comprising a motor (201,212,214,216,218) (see Fig. 4), a ball spline unit (126) (see Fig. 2), a rotating shaft (152), a first coupling (98) (see Col 11, lines 29-43), and a cylinder holder (150) (see Fig. 2), which can be considered as a second coupling, for transmitting force of the ball spline unit to the rotation shaft unit.

Re claim 14, it appears that Asai et al.'s device allows the rotation shaft to be detached from the ball spline.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asai et al. (6,012,222) in view of the Japanese Patent (JP 8-326864) or the Prior art (of Fig. 1), presented by applicant.

Asai et al.'s device, as presented in section 3 above, does not *show a spline unit having a spline nut and a spline shaft*.

However, the Japanese Patent (JP 8-326864) shows a spline unit having a spline nut and a spline shaft (5). Moreover, the prior art in Figure 1 shows a ball spline unit (20) having a spline nut (22) and a spline shaft (21). Accordingly, it would have been an obvious to one of the ordinary skill in the art at the time the invention was made to provide a well-known *a spline unit having a spline nut and a spline shaft* on the Asai et al.'s device as taught by the Japanese Patent (JP 8-326864) or the Prior art (of Fig. 1) in order to provide transmitting force of the ball spline unit to the rotation shaft unit.

***Response to Arguments***

6. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 3652

*Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL T. CHIN whose telephone number is (703) 305-1524. The examiner can normally be reached on MON-THURS (7:30 -6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, EILEEN LILLIS can be reached on (703) 308-3248. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



PAUL T. CHIN  
Examiner  
Art Unit 3652